Lake Charles Woodworkers Club, Inc. October 2009

Mentoring Program - If you have a project, a problem in any woodworking area, these members have volenteered to help. Give them a call. Jeff Cormier: 582-3278; George Kuffel: 478-2707; John Marcon: 478-0646; Chuck Middleton: 625-3134; Gary Rock: 433-1679; Eltee Thibodeaux: 436-1997; Dick Trouth: 583-2683. Each has years of experience and knowledge.

September Meeting Highlights

Joe Comeaux's great shop was our meeting place this month and we want to come back there as not only is it a great shop, but Sandra's muffins and biscuits are not to be beat.

Joe has an interesting and uncommon Shop Fox cabinet table saw. Joe also owns one of their band saws as well. We understand that these are made in the Grizzley factory and that likely means it is of very good quality. Apparently, the Fox Shop folks make a number of different products including jointers, lathes, planers, grinders and more. Search for Fox Shop on the Internet to find a distributor. Their selection is large and the quality and price seems good.

Jeff Cormier's safety talk this month focused on dust control. Besides the debris that collects on the tops of our shoes when woodworking, we sometimes produce a lot of dust when using power tools, particularly sanders.

Many species of trees defend themselves by producing natural insecticides and other organic poisons. In some people, these by-products can cause allergic reactions. So it is a safe practice to use a dust mask when power sanding or using power tools that can produce lots of dust such as table saws, routers, jointers and the like.

Certain types of wood are especially filled with organic pesticides including most so-called exotics, particularly those from S. America and Africa. For example, a walnut species from Africa, called *mansonia altissima* has another common name - sneeze wood - because of it's proclivity to cause you to start sneezing. The sneezing is a sign that you may be allergic to this wood.

Another source of raspatory irritation are from molds that grow in wood, such as the one that produces spalting in normally nontoxic woods. But there are common N. American woods that can also cause reactions such as cedar, cypress and even walnut. John Perry described the severe reaction he had in the past to overexposure to cypress, for example.

One sure way, besides wearing a good dust mask, to reduce the amount of airborne dust particles in your shop is to use a dust filtering system. These can be complex or simple depending on your particular need and there are commercial and home built units that do an effective job. Robin Richard suggested a method of measuring the airflow capability of your system (or even your air conditioner for that matter) by using a manometer. While I don't carry one of these in my car, I'll bet Robin can suggest where you can get one should you need to measure the air flow of your dust collection system. Thanks Robin and we'll put a list of toxic woods on the LCWW website at a future date.

Rob Standing brought us dramatic carvings of an American Indian of butternut and other beautiful carvings of cotten wood and linden. Rob said they were of the Nebraska school of John Burke. Photos were shown of the chain saw carving of Don McKay as well.

Mr. Thibodeaux had a nice scroll piece to display his first dollar (though I suspect it was not actually the first one as he likely spent that one on woodworking tools) plus a cool new tool from Rockler that does tenons for chairs. J.W. Anderson not only loves Velma but cypress as well and he brought us a great stool this month of that wood.

Jim Couvillion, one of our founding members, showed off some parts of a new child's rocking horse he is making. Jim has built nearly 400 of these over a 20 year period.

Pie Sonnier said that most of the pieces he does for his vehicles are done on his band saw but uses a scroll saw for those really smal items. The incredable 1932 Cadillac V-16 he made recently was a hit with the members. Pie also announced that one of his tracktor and bush hog units will be raffeled at the upcoming LCWW BBQ in October for the benefit of our club.You only need one ticket to win, though if you purchase five, you'll get six tickets. This is a prize worth having.

Joe Comeaux did a nice cabinet for his mini-lathe that was on display. It was a four drawer unit that was salvaged from Rita.

Up Comminng . . . Thursday, October 15, 2009 starting at 5:00 p.m. is the the Annaul Lake Charles Woodworkers BBQ. We will meet at the PPG Porter Family Center in Westlake. There will be lots of food, drink and a good time. Bring your latest projects or photos of them and please bring your magazines to swap with other members

Dancing Drill Bits

There are lots of jigs on the market that can help you to drill more accurate holes. These include X-Y drilling vices, centering jigs, specially milled drill bits and even laser pointers to help you align the drill bit when drilling curved blanks like antler. All of these jigs and tools work, but even if you use them consistently your drill bit may still wander when drilling some materials.

Small projects like writing pens, bottle stoppers, fragrance pens, key rings and similar items (that I'm working on now as Christmas gifts) require a drilled hole to turn the projects on the lathe. So it is important to increase the accuracy of your drilled holes.

One of the challenges you can encounter when drilling is called drill bit wander. When your drill bit wanders, the drilled hole is centered on the top of the blank, but it veers off the center path as the hole is drilled and it exits near the edge the blank. In severe cases, the bit may actually exit through the side of the blank. It can be frustrating at times, as drill bit wander can rear its ugly head at the most inconvenient of times. Fortunately, there a few things you can do to help eliminate drill bit wander, so your drilled holes will be straight and true.

If you use a drill press to drill your project blanks, a drill press vice is a good tool to have to keep your blank secure during drilling. I've been using an X - Y drill press vice for five years and it has served me well. X - Y vices allow you to move the blank in both the X and Y axis, as you are centering the blank under the bit. These vices clamp to your drill press table and are useful for holding a variety of materials for drilling.

Many other types of vices are available as well, from regular press type vices (no X - Y movement), to machinist vices, wooden hinge type holders bored to accept a pen or bottle stopper blank, as well as numerous other choices. No matter which vice you prefer, using a drill press vice will help you to drill straighter holes by keeping the blank from moving as it is drilled.

Drill bits have come a long way in recent years with new high-tech point designs that cut cleaner and exit with the bottom of the blank with little or no chipping, or tear out. These newer drill bits are far superior to the older split point drill bits and make drilling difficult materials much easier. No matter what kind of bit you prefer to use to drill your blanks, it needs to be sharp.

If your bits are old or they have hit your drill press vice a time or two on a deep plunge, then it's high time to get yourself some new bits. If possible, use your new bits only for drilling turning projects and not for general home repair to help maintain their accuracy and edge life.

Center finders are a very useful jig to have when drilling smaller blanks. By accurately finding the center of the blank, you know that you are drilling as accurately as possible. This is especially important when drilling small pen blanks, like the 1/2" size needed for some slim line pens. They are also just handy to have on hand and are inexpensive to purchase. Most center finders will accurately find the center of not only square turning stock, but round stock as well.

Even if you are using a good drill press vice, with a brand new high tech drill bit and you have accurately marked the center of your blank before drilling, you bit can still wander. The variable density in the springwood and heartwood can sometimes cause a brand new bit to wander. Some alternative materials are also notorious for being difficult to drill accurately, as well as a few natural materials.

You also gain a lot of experience working with various woods and alternative materials. I always experiment with different drilling techniques in an attempt to achieve the highest accuracy possible on a wide variety of materials. One of the techniques that I've found very useful is the "Reset Drilling Protocol" developed by Steve Russell after much trial and error in order to increase the accuracy of his drilled holes; no matter what material he was drilling.

This protocol came about through a lot of trial and error with different blank penetration techniques, drill speed tests and experiments using every type of drill bit he could get my hands on. After all of the dust had settled, he found that by resetting the drill bit after the initial penetration of the blank, drill bit wander was virtually eliminated.

The protocol requires a X-Y vice and goes as follows. Securely lock the blank into your X - Y vice and move the X and Y adjusting levers to center the drill bit with the marked center on your project blank.

Make sure the blank is sitting square in the jaws of the vice. If necessary, use a small machinist's right angle jig to orient the blank correctly. If you do not have a small 90 degree square, simply loosen the jaws slightly on the blank and lower your drill bit down the front side of the blank. Adjust the blank until it is straight up against the side of the drill bit and tighten the jaws securely. If your drill press table is setup square to the post column, your drill bit can act as a makeshift alignment jig. If necessary, re-center the blank with the point of the drill bit using the X- Y levers.

When you're ready to drill the hole, turn the drill press

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on and enter the top of the blank very slowly. The idea here is to let the bit cut a clean entrance hole in the top of the blank. When the entrance hole is cut, gently lower the bit into the top of the blank, but only penetrate to a depth of 1/4".

Withdraw the bit and turn the drill press off. Rotate the drill bit until you can clearly see one side of the bit and manually lower the bit down into the drilled hole. As the bit enters the hole, look to see if it goes in straight, or if it is pushed off to the side slightly. If you see the bit goes off to the side as it enters the drilled hole, loosen both of the X and Y locking grub screws and adjust the blank using the levers until the bit enters the hole straight and true.

Move the bit in and out a few times to make sure that it enters the hole without veering off to one side. A good strong light is needed to clearly see the bit entering the hole and if it goes in correctly or not. If you don't have a supplemental task light for your drill press (the built in light is insufficient to determine drill bit wander), now is a good time to buy one. The magnetic task lights that Craft Supply sells - Moffitt Lights - are very well made and will accept up to a 100-watt bulb (though I've used a 'white' florescent bulb for years). The magnetic base is great, since you can move it around to different equipment as needed.

Lock everything back down and drill your hole using the reset center point. In practice, resetting the drill bit takes about 15 - 20 seconds, not much time at all to prevent wander. Of course, your bit will only wander occasionally, but if you get in the habit of checking it according to my protocol, you will be a happy camper when you turn your blank over to see where the bit exited the blank.

Note: If you see that the bit enters the blank correctly, no problem Continue drilling according to your current setup. If however, you see the bit wanders slightly as it enters the hole, reset the drill bit according to the above procedure.

This protocol has helped me through the years and I know that it will help you as well. The next time you need to drill a hole in a project blank, use Russell's method and see how easy it is to increase the accuracy of your drilled holes. *Barry Humphus from Steve Russell's ideas*.

Taking a Dowel Joint Apart

To turn a wobbly chair into a sturdy one, first you have to disassemble it. Lots of commercially made chairs use dowels hold together butt joints between the legs and the chair frame. There are a couple of ways to separate them such that you can effect a good repair. Use these methods to conquer dowels that don't want to budge. Furniture repair would be much easier if dowels worked loose at both ends at the same time. Unfortunately, they tend to stay solid at one end while wiggling at the other. So even when a chair is one the critical list, digging the dowels out for replacement usually poses a major challenge.

If one method fails, move on to the next. You'll get those dowels out.

Break the joints apart. In many situations, you can disassemble a dowel joint with nothing more than a bar spreader and a non-marring mallet.

Fortunately, most chairs that are assembled with dowels have been jointed with yellow or white glue. If dowels remain in some holes and won't budge, try to loosen them with a few drops of water or isopropyl (contains water) alcohol. Let it soak in for a few minutes to soften the glue. If the glue was epoxy, you may be forced to cut them off and re-drill the hole. If you do this, use yellow or white glue as it is reversible, unlike epoxy.

If water or alcohol around the outside of the dowels has no effect, drill a hole into each one, and squirt water or alcohol inside. Wait a few minutes while it soaks through the wood, then try to yank out the dowel with pliers or side cutters.

A dowel that's broken near the surface is tough to grip with pliers. So run a small screw into the dowel, then pry it out with a claw hammer.

After removing the dowel, take a twist drill the same diameter as the hole and turn it by hand to clean out any remaining glue or chips. You're almost certain to change the hole's shape if you use an electric drill.

You may notice that the old dowels failed because they were sitting in a little glob of glue at the very end of the hole. Don't repeat that mistake.

Replace the old ones with fluted dowels that you've coated with glue. Daub glue all around the inside of the holes, too. You'll form a solid bond that should make the joint last a few years longer this time. *Barry Humphus*

Annual BBQ

The Annual Lake Charles Woodworkers BBQ comes up this week. Beginning at 5:00 p.m., Thursday, October 15, we will gather at the PPG Porter Hall Family Center in Westlake. Tickets are still available and still only $10 per person. Also bring some of your work or photos and this is exactly the right time to clear out all those dusty woodworking magazines and trade them in for dusty ones you haven't seen. Lots of food this year, even for those who don't need it.

Lake Charles Woodworkers Annual BBQ

The annual BBQ is a wonderful event as we get to visit folks we do't see nearly enough. There will be great food and lots of it this year (yes, you can go back for 'seconds' if you want). There will be plenty to drink including a beer or glass of Jeff Cormier's wonderful home-made wines.

To get there, bring a ten dollar bill for each person who comes with you who has not paid and bring this to the PPG Porter Family Center in Westlake. From Lake Charles, get on I-210 going west and take the Industries exit (not the Lake Charles exit). At Pete Manena Rd., turn left and follow it to Prater Rd. Turn left onto Prater (which turns into Bayou D'Inde Rd). At the first left, turn left onto Old Lockport Rd (there is a sign for PPG Family Center) and follow Old Lockport to the first right into the PPG Family Center park area on your right.

October 2009

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